

INFO-HAMS Digest

Wed, 8 Nov 89

Volume 89 : Issue 855

Today's Topics:

Contest log program?  
ftp access for mods database  
How to use the incoming QSL bureau?  
ICOM IC-740  
QSLs and SASEs (2 msgs)  
Tuning dipoles and antennas.

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Date: 7 Nov 89 13:17:49 GMT

From: att!cbnewsj!k2ph@ucbvax.Berkeley.EDU (The QRPer)

Subject: Contest log program?

>From article <1250@marlin.NOSC.MIL>, by price@marlin.NOSC.MIL (James N. Price):  
> In article <30500273@ux1.cso.uiuc.edu> phil@ux1.cso.uiuc.edu writes:  
>>  
>>I would be interested in seeing or hearing about contest logging programs  
>>that are available as freeware or shareware, with sources.  
>  
> So would I, especially one that's geared for Sweepstakes.  
>  
> And I'd even be willing to PAY (heaven forbid) a nominal amount  
> for a program if it's good (i.e. the non-DX equivalent to the K1EA  
> program for CQWW, ARRL Test, etc).  
>  
> --Jim, K6ZH

Dave, K8CC, has a program similar to K1EA's software except that it supports North American Sprint, ARRL Sweepstakes, and (I think) IARU HF Championship. Dave tried to make the human interface as nearly similar to K1EA as he could and I'd say he's been about 90 per cent successful in that regard. Like K1EA, you can key your radio from the serial port, although unlike K1EA, you can't key it from the parallel port. However, K8CC's software enables you to key a digital voice keyer from the parallel port, assuming you have a DVK to key.

Dave has said he will make his program available to anybody who wants it. I simply sent him a 5.25 inch formatted floppy with a stamped self-addressed mailer and he had it back to me in about two weeks. I'm not sure he would want to be deluged with mail so, if there is enough interest, I could post it.

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Bob Schreibmaier K2PH | UUCP: att!mtuxo!k2ph or k2ph@mtuxo.att.com  
AT&T Bell Laboratories | ARPA: k2ph%mtuxo@att.arpa

Middletown, N.J. 07748 | ICBM: 40o21'N, 74o8'W

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Date: Wed, 8 Nov 1989 13:09 EDT  
From: Mark Bramwell 519 661-3714 <watmath!julian!business.uwo.ca!  
MBramwel@uunet.UU.NET>  
Subject: ftp access for mods database

The mods database is now available through the internet.

IP address: 129.100.22.100 HAMSTER.business.uwo.ca

If you want to post a file, please email it to me.

A separate copy is stored on the IBM 4381 for mail users, therefore  
I need to know if a new file comes in.

Enjoy, let me know if you have any problems.

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Date: 7 Nov 89 13:42:16 GMT  
From: asuvax!anasaz!john@handies.ucar.edu (John Moore)  
Subject: How to use the incoming QSL bureau?

In article <838@soleil.UUCP> gopstein@soleil.UUCP (Rich Gopstein) writes:  
]  
]Ok, I admit, I'm one of those people who doesn't have an  
]envelope at the QSL bureau. How does the bureau work?  
]I occasionally work DX on the HF bands, and would like to  
]use incoming and outgoing QSL bureaus. I am an ARRL member,  
]so that's not an issue.

In fact, why doesn't a knowledgeable DX'er post a nice tutorial on  
how to QSL, how to get QSL's from DX, etc. For example, I worked  
MIR last spring. How do I get a QSL? How do I use a bureau. If  
I send a SASE, can I use US stamps, or is there something international  
to put on the return envelope?

I've been a ham 28 years, but have rarely gone after DX, and am  
really baffled. Now that my daughter is interested, I want to know  
what to do.

Thanks in advance.

--

John Moore (NJ7E) mcdphx!anasaz!john asuvax!anasaz!john  
(602) 861-7607 (day or eve) long palladium, short petroleum  
7525 Clearwater Pkwy, Scottsdale, AZ 85253  
The 2nd amendment is about military weapons, NOT JUST hunting weapons!

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Date: 7 Nov 89 18:13:40 GMT  
From: brutus.cs.uiuc.edu!wuarchive!texbell!texsun!pollux!attctc!mjb!tn!  
root@apple.com (Mark J. Bailey)  
Subject: ICOM IC-740

Hello All,

I recently bought a mint condition Icom IC-740 along with a Ten-Tech 229 200w/2kw antenna tuner from a friend. The 740 had the IC-PS740 builtin power supply, the IC-EX242 FM option, the IC-EX243 electronic keyer, and the FL-52 455kHz CW/RTTY filter installed.

I am interested in trying to locate some of the other options such as the FL-44 455 kHz SSB filter, the FL-45 9.0115 mHz CW/RTTY filter, and the IC-EX241 marker unit. Also, the manual mentions using a transverter for VHF/UHF when the FM unit has been installed. In particular, I would like to know what transverter (ICOM #?) could be used with it and if they mean theirs or some third party transverter in general, and if it is some third party unit, whos would work and where could one be gotten? Of the filters mentioned above, I am particularly interested in the FL-44 SSB filter.

Also, the unit has receive only on 17 and 12 meters, but being a micro-processor controlled type radio, and that it has specific coverage of those bands, I sort of figured that there was probably some sort of transmit inhibit diode or something. Can anyone elaborate on this? Has anyone succeeded in enabling transmit on these bands?

Any information on anything above would be greatly appreciated. As I said the unit is in mint condition and as a new licensee, I am eager to gather as much information on it as possible. Any hints and tips from other 740 owner would be highly valued too! I noticed that the 740 was replaced by the 745 only a year or two after it was introduced (in the December 1982 ICOM catalog I think). My guess is that with the new bands, and desires for general coverage, and improvements in computer controls and memories, the 745 was quickly needed. Does anyone know of any other reasons that brought this about?

Please email responses. Thanks in advance!

Mark.

--  
Mark J. Bailey "Ya'll com bak naw, ya hear!"  
USMAIL: 511 Memorial Blvd., Murfreesboro, TN 37129 -----  
VOICE: +1 615 893 0098 | JobSoft  
UUCP: ...!{ames,mit-eddie}!attctc!mjb!mjb | Design & Development Co.  
DOMAIN: mjb@mjb!tn.MFEE.TN.US CIS: 76314,160 | Murfreesboro, TN USA

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Date: 7 Nov 89 22:39:32 GMT  
From: victim.dec.com!reisert@decwrl.dec.com (Bats aren't bugs!!! 07-Nov-1989  
1739)  
Subject: QSLs and SASEs

In article <20598@ut-emx.UUCP>, trey@ut-emx.UUCP (Trey Garlough) writes...

>consider Frank nothing less than discourteous. If you want to "get back  
>at Frank" and his success in contesting because he didn't send you a card,  
>then I suggest that you never call Frank ever again in another contest.  
>Furthermore, I suggest you contact his competitors, giving them a few extra  
>points.

As a member of the YCCC (Yankee Clipper Contest Club), I heartily endorse  
this idea. Work all the W1's and W2's you hear, and leave the W3's behind  
;-)

jim, AD1C

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"The opinions expressed here in no way represent the views of Digital  
Equipment Corporation."

Jim Reisert Internet: reisert@tallis.enet.dec.com  
Digital Equipment Corp. UUCP: ...decwrl!tallis.enet!reisert  
Littleton, MA 01460

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Date: 7 Nov 89 22:37:38 GMT  
From: victim.dec.com!reisert@decwrl.dec.com (Bats aren't bugs!!!)  
Subject: QSLs and SASEs

In article <20598@ut-emx.UUCP>, you write...

>consider Frank nothing less than discourteous. If you want to "get back  
>at Frank" and his success in contesting because he didn't send you a card,  
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>Furthermore, I suggest you contact his competitors, giving them a few extra  
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As a member of the YCCC (Yankee Clipper Contest Club), I heartily endorse this idea. Work all the W1's and W2's you hear, and leave the W3's behind ;-)

jim, AD1C

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"The opinions expressed here in no way represent the views of Digital Equipment Corporation."

Jim Reisert Internet: reisert@tallis.enet.dec.com  
Digital Equipment Corp. UUCP: ...decwrl!tallis.enet!reisert  
Littleton, MA 01460

Date: 7 Nov 89 17:33:08 GMT  
From: cs.utexas.edu!oakhill!dover!darla!waters@tut.cis.ohio-state.edu (Strawberry Jammer)  
Subject: Tuning dipoles and antennas.

In article <1260002@hpmwtlb.HP.COM> timb@hpmwtd.HP.COM (Tim Bagwell) writes:  
}It is not necessary to have a resonant antenna to efficiently radiate energy.

True

}If an antenna is matched to the source, regardless of how it is matched, all the energy sent down the transmission line is radiated (neglecting, of course, losses in the line, tuner, traps, etc.).

The same is true in an unmatched condition, the only difference is in line loss.

} You need to define what you mean by radiation efficiency. The fact is that  
} the radiation pattern will be different for a non-resonant antenna than for  
} a resonant one. But this may be desirable in certain situations.

The normal "model" uses a concept called radiation resistance, that is the equivalent "load" presented by the radiated energy. The ratio of radiation resistance to other resistive losses such as the ohmic resistance of the antenna and anything else which is electrically coupled to the antenna such as the ground determines the efficiency of the antenna. Very few amateur installations get over 50% efficiency BTW.

{If your antenna SWR is 2:1, you are losing about 10% of the transmitted power back to the transmitter load! This is power that is not radiated anywhere. Contrast this to a non-resonant but matched antenna which will radiate 100% of the transmitted power (again neglecting losses), albeit, into some different pattern. If the antenna length is only slightly off resonance, the pattern will not be affected significantly.

NOT TRUE! SWR losses are dependant on the line loss, they are IN ADDITION to the "matched" loss. If the "matched" loss is under 1db (RG213 at <30Mhz for example) then 2:1 or 3:1 SWR will add less than 1db additional loss. See the ARRL Antenna Book for a very complete treatment of this including charts. This becomes significant at VHF/UHF frequencies or when using smaller coax such as RG58/59.

If you run high power (say over 100 watts at HF or 25 watts at UHF) then the power rating of the cable becomes significant. RG213 is rated at approximately 2Kw RF at 30Mhz with 1:1 SWR, with 2:1 SWR the peak voltages and currents are twice their 1:1 values so the line can handle only 1Kw RF EVEN THOUGH the losses are not increased this much. It is possible to melt coax with enough power and it melts at the current nodes, I have seen this with 500W into RG58 coax on 2M. The cable actually melted every 38 inches (1/2 wavelength)!

{Even if you tune the antenna exactly to resonance, it is unlikely that it will be matched to the transmission line over any practical bandwidth.

An "exact" match is only possible at one EXACT frequency. As much as 1Hz deviation will introduce a reactive component, but you won't be able to measure it. What is much more useful is the ACCEPTABLE match, normally under 2:1 at HF but some Transmitters require under 1.5:1 for full power.

{This again  
{introduces SWR and a reduction in maximum radiated power.

True, but probably not significant. It is quite possible to design antennas with ACCEPTABLE matches over each amateur band. A "cage dipole" on 3.5Mhz for example imitates a 3ft diameter element and will have less than 2:1 SWR from 3.5 to 4 Mhz when properly tuned.

{So I say use a good quality antenna tuner with parallel wire transmission line  
{and don't worry too much about resonating the antenna length.

Workable iff (if and only if) you can use open wire line properly (min 12 inches from ANY metal the entire length), and want to fiddle with an antenna tuner.

Generally bandwidth is not a problem for a dipole build from reasonable size wire (no 12 or no 14) except on 80M. There a cage dipole is needed.

Before you start getting too worried about SWR and antenna tuners you need to do two things (from the ARRL Antenna Book BTW), (1) ALWAYS measure antenna parameters AT THE ANTENNA! and (2) use a noise bridge that tells you reactive (L/C) component as well as resistive (R). Trying to do any serious antenna tuning with just an SWR bridge is an exercise in futility, you just don't have enough information.

The "in line" SWR meter has really two uses: check to see that nothing has come loose and as a quick check of actual line loss. If you check the SWR with NOTHING connected at the antenna end (try both open and shorted) then a 1:1 match means ALL the power is being lost in the cable - replace the cable! I think the ARRL Handbook has a chart relating SWR to actual line loss using this method, from memory 3:1 means 1/2 the energy is being lost, and infinite SWR means no loss (and of course never happens).

Oh yes DON'T use "RG8" coax unless it is a "name" brand such as Belden, the designation is meaningless any more and there is a LOT of "junk coax" out there. If you are buying new then by RG213 or similar which IS MIL Spec. Try out some of the "cheap" cable with the SWR checking method and you will soon see why you need the better stuff.

Especially at HF, "if it conducts it will radiate" the rest is optimization!

Finally - the ARRL Antenna Book is a gold mine of good information, if you don't have it then you need it!

\*Mike Waters AA4MW/7 waters@dover.sps.mot.com \*  
Justice is incidental to law and order.  
-- J. Edgar Hoover

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End of INFO-HAMS Digest V89 Issue #855  
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